

COVERAGE NAME: FUNC

COVERAGE AREA: Statewide, District, County

COVERAGE DESCRIPTION:

The FUNC coverage is line coverage representing the California Department of Transportation (Caltrans) State Highway routes, highway ramps, and Functionally Classified Roads. Dynamic Segmentation is not available in the Statewide and District coverages.

USER NOTES:

In order to run dynamic segmentation in the FUNC coverage, two info files are needed: RATRTE and SEC RTE. The Caltrans postmile system is the linkage between the FUNC coverage and other Caltrans databases. The SECT\_ID item is the linkage between the FUNC coverage and the HPMS database. There is another route system on the county coverage called llr. This route system is no longer maintained but is being preserved for future evaluation.

Sign Routes: In order to do analysis by highway signed routes, it is necessary to clarify the coincident route coding. When two Interstate, state or business route numbers occupy the same roadway, the coincident route number is that route which is not postmiled and is coded in item COINRTE (i.e.: State route 70 is signed on state route 99 in Sacramento. State route 70 is coded in COINRTE.) When three state route numbers or three interstate route numbers occupy the same roadway, the second coincident route number is coded in item COINRTE2 (i.e. Route 59 and route 140 are on route 99 in Merced. Route140 is coded in COINRTE and Route 59 is coded in COINRTE2.)

The definitions in the HPMS database are not identical for the TRKRT and STRAHNET items.

VITAL STATISTICS:

Datum:	NAD 83
Projection:	Albers
Units:	Meters
1st Std. Parallel:	34 degrees N
2nd Std. Parallel:	40.5 degrees N
Longitude of Origin:	-120 degrees W
Latitude of Origin:	0 degrees N
False Easting:	0
False Northing:	-4,000,000
Source Media:	USGS DLG
Source Projection:	Universal Transverse Mercator Zone 10/11
Source Units:	Meters
Source Scale:	1:100,000
Capture Method:	Scanned
Conversion Software:	ARC/INFO rev. 5.0.1
Data Structure:	Vector
ARC/INFO Coverage Type:	Arc
ARC/INFO Precision:	Double
ARC/INFO Tolerances:	10 meters
Frequency of Updates:	Annual postmile updates or other significant changes.

Data Updated: Jun 1998 (Scenic attribute)

Jan 2000 (TRKRT)  
 Feb 2001 (dynseg corrections for slo, ora, sf)  
 Apr 2001 (removed hgroup item, changed seg to sect\_id)  
 Sep 2001 (2000 Postmiles, improved topology and functional classification updates)  
 Jun 2002 (TRKRT, topology, fc, HPMS, scenic)  
 Oct 2002 (2001 Postmiles, S & U Routes postmiled)  
 May 2003 (NHS, STRAHNET from FHWA 10/2002)  
 Oct 2003 (2002 Postmiles, TRKRT, NHS, SCENIC, Functional classification updates and HPMS related updates)  
 Update Media: Caltrans County Map Series  
 Update Method: Digitizing  
 Update Software: ARC/INFO rev. 7.2.1, ArcGis 8.3

#### DATA DICTIONARY:

File name: FUNC.AAT  
 Record length: 174

NOTE: Items common to all line coverages: FNODE#, TNODE#, LPOLY#, RPOLY#, LENGTH, <coverage>#, and <coverage>-ID are not shown.

COLUMN	ITEM NAME	WIDTH	OUTPUT	TYPE	N.DEC
33	RTE	3	3	I	-
36	SUBRTE	3	3	I	-
39	ROUTE2	2	5	B	-
41	STATUS	2	2	B	-
43	RAMP	2	2	B	-
45	CO	3	3	C	-
48	DIST	2	2	C	-
50	SEG1#	4	4	C	-
54	SEG2#	6	6	C	-
60	RUCODE	1	1	I	-
61	URBCODE	3	3	I	-
64	FUNCCL	2	2	I	-
66	NEWFUNCCL	2	2	I	-
68	CONSTRUCTED	1	1	I	-
69	TRKRT	2	2	I	-
71	STRAHNET	1	1	I	-
72	HPCORD	1	1	I	-
73	NHS	1	1	I	-
74	LIFE	1	1	I	-
75	SCENIC	1	1	I	-
76	BIKE	1	1	I	-
77	ICB	3	3	I	-
80	IRRS	1	1	I	-
81	F&E	1	1	I	-
82	LLRSUB	2	2	I	-
84	SUBFLG	1	1	I	-
85	BPM	8	8	N	3
93	EPM	8	8	N	3
101	ITMS	1	1	I	-
102	ITMS-ID	28	28	C	-

130	GIS-ID	9	9	C	-
139	UPDATE-ID	9	9	C	-
148	NUMLANE	2	2	C	-
150	ACCONT	1	1	I	-
151	RSYS	1	1	I	-
152	IRTE	3	3	I	-
155	USRTE	3	3	I	-
158	SRTE	3	3	I	-
161	LRTE	3	3	I	-
164	BRTE	3	3	I	-
167	COINRTE	3	3	I	-
170	COINRTE2	3	3	I	-
173	EDIT_DATE	8	8	D	-
181	EDIT_TYPE	3	3	C	-
184	EDIT_SOURCE	3	3	C	-

**\*\* REDEFINED ITEMS \*\***

33	RDS	6	6	I	-
48	SECT_ID	12	12	C	-
50	SEG#	10	10	C	-

**ITEM DESCRIPTIONS:**

**RTE:** Postmile Route number

DO NOT MODIFY. Corresponds to TASAS postmile route numbers. It may or may not correspond to the Legislative Route number or the signed route number seen on highway maps and road signs. This item is used in dynamic segmentation. To find Postmiled State Highways select RTE ne 0 and STATUS= 1,4,5,6.

**SUBRTE:** Subroute

DO NOT MODIFY. This item is used in dynamic segmentation.

**ROUTE2:**

This item is used to display state highways that are within a national park, adopted and proposed routes, and S & U routes.

**STATUS:** Status of State Highways

- 0 - Not State Highway
- 1 - Constructed State Highway (paved or unpaved) (Postmiled)
- 2 - Adopted; Not yet constructed. Alignment known. (Not postmiled)
- 3 - Proposed; Not yet constructed. Alignment unknown. (Not postmiled)
- 4 - Constructed State Highway (Non ADD) (Postmiled)
- 5 - Constructed State Highway (Pending relinquishment.) (Postmiled)
- 6- Unrelinquished Route or Supplemental Route (U & S routes) (Postmiled)

*ITEM DESCRIPTIONS (continued):*

RAMP: Flag for ramps

0 - not highway ramp

1 - highway ramp

NOTE: Most ramps reflect the original DLG line work. Ramp lengths are not postmiled.

CO: Caltrans county abbreviation

DIST: Caltrans District number

SEG1#: Part 1 of HPMS segment ID (ROUTE-ID)

SEG2#: Part 2 of HPMS segment ID (SECTION-ID)

Note: SEG1#, SEG2# are HPMS items. DO NOT MODIFY without consulting HPMS staff..

RUCODE: Urban/Rural Designation Code

1 = Rural

2 = Small Urban

3 = Urbanized

URBCODE: Urbanized area codes, unique FIPS codes for each urbanized area.

FUNCCL: Item used to describe functional classification system

0 =	Not Functionally Classified	
1 = Rural	Principal Arterial-Interstate	(PAI)
2 = Rural	Other Principal Arterial	(OPA)
6 = Rural	Minor Arterial	(MA)
7 = Rural	Major Collector	(MJC)
8 = Rural	Minor Collector	(MNC)
11 = Urban	Principal Arterial – Interstate	(PAI)
12 = Urban	Principal Arterial/Other Fwys or Expwys	(OFE)
14 = Urban	Other Principal Arterial	(OPA)
16 = Urban	Minor Arterial	(MA)
17 = Urban	Collector	(COL)

NEWFUNCCL: Item used to identify proposed functional class changes that have not been verified by the Office of Highway System Engineering. This item uses the same coding values as FUNCCL.

CONSTRUCTED: Item used to identify constructed or not constructed roadways. It is based on the federally approved CRS maps for non highways and status 2 and 3 for highways.

0 = Not Constructed

1 = Constructed

*ITEM DESCRIPTIONS (continued):*

TRKRT: Note: The TRKRT item has been superseded by the new (April 2004) TRKNET data layer. Having TRKNET as a separate layer enables more attributes to be associated with it. For transition, TRKRT will remain as a FUNC item until the end of 2004, at which time it will be dropped.

TRKRT: Item used to define National Truck Network

- 0 = Not part of the Truck Network
- 1 = National Network for STAA Trucks
- 2 = Terminal Access Routes
- 3 = Routes for Tractor-Semis with Kingpin to Rear Axle Length < 30 Ft.
- 4 = Routes for Tractor-Semis with Kingpin to Rear Axle Length 30 Ft.
- 5 = Routes for Tractor-Semis with Kingpin to Rear Axle Length 32 Ft.
- 6 = Routes for Tractor-Semis with Kingpin to Rear Axle Length 34 Ft.
- 7 = Routes for Tractor-Semis with Kingpin to Rear Axle Length 36 Ft.
- 8 = Routes for Tractor-Semis with Kingpin to Rear Axle Length 38 Ft.
- 9 = Routes for Tractor-Semis with 65-Foot Overall length and 40-Foot Kingpin to Rear Axle Length (CA LEGAL)
- 10 = Routes with Restrictions

NOTE: To view the special restrictions, go to <http://www.dot.ca.gov/hq/traffops/trksnwim/motion/truckmap/> and click on the link "Routes 1-99" or "Routes 101 to 980".

STRAHNET: Item defining Strategic Highway Network (STRAHNET) or STRAHNET Connectors. It is coded to reflect the internal FHWA coding. The Office of GIS added code STRAHNET = 6. This value is for Interstate STRAHNET arcs only. The purpose for distinguishing the Interstate is to assist FHWA with their next update cycle. FHWA did not separate 'Interstate' from routes 'Not on the STRAHNET' (code = 0).

NOTE: To make an official STRAHNET map use the following query:

Entire STRAHNET system	STRAHNET > 0
Or	
STRAHNET route	STRAHNET = 1, 6
STRAHNET connectors	STRAHNET = 2, 3, 4
STRAHNET temporary route	STRAHNET = 5 ( At this update California does not have any route coded STRAHNET = 5

- 0 = Not STRAHNET
- 1 = Non Interstate STRAHNET arc
- 2 = STRAHNET Priority 1 Connector
- 3 = STRAHNET Priority 2 Connector
- 4 = STRAHNET Priority 3 Connector
- 5 = Temporary STRAHNET Route
- 6 = Interstate STRAHNET arc

HPCORD: Item used to define Congressional High Priority Corridor.

- 0 = Not on a Congressional High Priority Corridor
- 1 = Congressional High Priority Corridor

NHS: Item used to define road systems that make up the National Highway System. It is coded to reflect the internal FHWA coding.

NOTE: To make an official NHS map use the following query:

Interstate	NHS = 1
Other NHS	NHS = 2, 3, 4, 5, 6, 7
Connectors	NHS = 8

*ITEM DESCRIPTIONS (continued):*

**Other System Selections:**

Congressional or ISTEA High Priority Corridor: NHS = 2, 5, 6

Strahnet: NHS = 1, 3, 4, 6

- 0 = Not on National Highway System
- 1 = Eisenhower Interstate System
- 2 = ISTEA High Priority Corridor
- 3 = Non-Interstate STRAHNET
- 4 = STRAHNET Connector
- 5 = ISTEA High Priority Corridor / Non-Interstate STRAHNET
- 6 = ISTEA High Priority Corridor / STRAHNET Connector
- 7 = Other NHS
- 8 = Approved Intermodal Connector
- 9 = Proposed Intermodal Connector

LIFE: Item used to define LifeLine Routes on the State Highway System.

- 0 = Not a Life Line Route
- 1 = Life Line Route

SCENIC: Item used to define a State Highway that is designated as a Scenic Highway.

- 0 = Not a Scenic Highway
- 1 = Officially designated as a State Scenic Highway
- 2 = Eligible to become a State Scenic Highway
- 3 = Unconstructed State Highway eligible for Scenic designation
- 4 = Officially designated County Scenic Highway
- 5 = Connecting Federal Highway (Inside National Parks)
- 6 = Officially designated Historic Parkway

BIKE: Item used to define bike routes on a State Highway.

- 0 = Not State Highway; bicycle access not determined or evaluated.
- 1 = State Highway is accessible for bicycles.
- 2 = State Highway is inaccessible for bicycles .

ICB: A numeric code used to identify intercity bus routes and the carriers who use that route.

(Please refer to "ICB CODES" attachment)

IRRS: Item used to define the Interregional Road System.

- 0 = Not an Interregional Road System
- 1 = Interregional Road System
- 2 = Interregional Road System, unconstructed routes
- 3 = Not an Interregional Road System, selected unconstructed routes

F&E: Item used to define the Freeway and Expressway System.

0 = Not a Freeway and Expressway System

1 = Freeway and Expressway System

*ITEM DESCRIPTIONS (continued):*

2 = Freeway and Expressway System, unconstructed routes

3 = Not a Freeway and Expressway System, selected unconstructed routes

LLRSUB: HPMS field; LLR Subroute

DO NOT MODIFY.

SUBFLG: HPMS field; Flag

DO NOT MODIFY.

BPM: THIS IS NOT A CALTRANS POSTMILE VALUE. This HPMS field is for FHWA purposes only. The value in this field represents the beginning odometer value of related HPMS segment. This is not the odometer value for a particular arc but only for the beginning of the segment that the arcs comprise.

EPM: THIS IS NOT A CALTRANS POSTMILE VALUE. This HPMS field is for FHWA purposes only. The value in this field represents the ending odometer value of related HPMS segment. This is not the odometer value for a particular arc but only for the end of the segment that the arcs comprise.

ITMS: Item to identify an Intermodal Transportation Management System (ITMS) corridor / connector.

(CURRENTLY THIS ITEM IS NOT CODED)

ITMS-ID: This ID is used to relate to the ITMS model.

(CURRENTLY THIS ITEM IS NOT CODED)

GIS-ID: An internal ID used by the Caltrans Service Center.

DO NOT MODIFY

UPDATE-ID: This ID is used to date arcs that are updated.

NUMLANE: Number of lanes. Used for display on the Caltrans State Highway Map. May not be the same as shown in the State Highway Inventory Database.

02 = 2 lanes

04 = 4 or more lanes

ACCONT: Access control. Used for display on the Caltrans State Highway Map. May not be the same as shown in the State Highway Inventory Database.

0 = Not displayed

1 = Freeway

2 = Expressway

3 = Conventional

4 = National Park

5 = Relinquished

6 = Toll Road

7 = Adopted  
8 = Proposed

*ITEM DESCRIPTIONS (continued):*

RSYS: Item used to define the type of Route System.

0 = Not a Route System  
1 = Interstate Route System  
2 = US Route System  
3 = State Route System

IRTE: Signed Interstate route number

This item is used to display highways that are signed Interstate to the traveling public.  
This item is also used to display the Interstate symbol on maps.

USRTE: Signed US routes number

This item is used to display highways that are signed US to the traveling public.  
This item is also used to display the US symbol on maps.

SRTE: Signed State routes number

This item is used to display highways that are signed State to the traveling public.  
This item is also used to display the State symbol on maps.

LRTE: Legislative route number

This item is used to display the State Highway Route as defined in the Caltrans Statutes sections 300 - 635. This item is also used to display the legislative symbol on maps.

BRTE: Business route number

This item is used to display routes that are signed Business to the traveling public.  
This item is also used to display the business symbol on maps.

COINRTE: Coincident route number

This item is used to display the number of the coincident route when there are two state routes or two interstate or two business routes on the same roadway. This item is also used to display the appropriate symbol on maps.

COINRTE2: Second Coincident route number

This item is used to display the number of the second coincident route when there are three state routes or three interstate routes on the same roadway. This item is also used to display the appropriate symbol on maps.

EDIT\_DATE: Date the change was made to the data. (YYMMDD)

EDIT\_TYPE:           t = topology  
                  a = attribute  
                  f = functional classification



p = postmile  
r = realignment

*ITEM DESCRIPTIONS (continued):*

EDIT\_SOURCE:      gis = GIS data edits  
                    tas = TASAS  
                    tos = Traffic Operations Systems  
                    hpm = HPMS  
                    pla = Planning  
                    mas = Mass Transit  
                    lsc = Landscape  
                    hse = Highway Systems Engineering  
                    mul = multiple sources

**\*\* REDEFINED ITEMS \*\***

RDS: This item is a combination of the RTE and SUBRTE items in the <coverage>. AAT file. It is the linkage between the arcs and the RTE route system.

SECT\_ID: This item is a combination of the DIST, SEG1# and SEG2# items in the <coverage> AAT file. It is used as a relate item to the HPMS database category 7A. This item may be duplicated between counties.

SEG#: This item is a combination of the SEG1# and SEG2# items in the <coverage>. AAT file.  
DATABASE RELATION: HPMS

HPMS is a county info table that contains several HPMS database items. The relate item is sect\_id.

**DATA QUALITY ASSESSMENT:**

**ICB      CARRIER**

0	none
101	Amtrak Bus Connectors
102	Amador Stage Lines
103	California Yosemite Tours
104	Desert Stage Lines
105	Green Tortoise
106	Green Belt Stages
107	Greyhound
108	Orange Belt Stages
109	Trailways
110	Via Adventures
111	Vista
201	Amtrak Bus ** Greyhound
202	Amtrak Bus ** Orange Belt
203	Amtrak Bus ** Vista
204	Desert Stage ** Trailways
205	Green Tortoise ** Greyhound
206	Greyhound ** Orange Belt
207	Greyhound ** Trailways
208	Trailways ** Vista
209	Greyhound ** Vista
210	Greyhound ** Desert Stage

301 Amtrak Bus \*\* Green Belt \*\* Greyhound  
 302 Amtrak Bus \*\* Green Tortoise \*\* Greyhound  
 303 Amtrak Bus \*\* Greyhound \*\* Orange Belt  
 304 Amtrak Bus \*\* Greyhound \*\* Trailways  
 305 Cal Yosemite \*\* Greyhound \*\* Via Adventures  
 306 Cal Yosemite \*\* Greyhound \*\* Trailways  
 307 Greyhound \*\* Trailways \*\* Vista  
 308 Greyhound \*\* Trailways \*\* Orange Belt  
 309 Amtrak Bus \*\* Greyhound \*\* Desert Stage  
  
 401 Amtrak Bus \*\* Greyhound \*\* Trailways \*\* Amador  
 402 Amtrak Bus \*\* Greyhound \*\* Cal Yosemite \*\* Via Adventures  
 403 Amtrak Bus \*\* Greyhound \*\* Trailways \*\* Orange Belt  
 404 Amtrak Bus \*\* Greyhound \*\* Trailways \*\* Cal Yosemite  
  
 501 Amtrak Bus \*\* Amador \*\* Green Tortoise \*\* Greyhound \*\* Trailways  
 601 Amtrak Bus \*\* Amador \*\* Green Belt \*\* Green Tortoise \*\* Greyhound \*\* Trailways

April 23, 2004